REF: 00629-RF-02

**Comments by**
**Colorado Department of Public Health & Environment**
**on the**

**Draft Responsiveness Summary for the IM/IRA Decision Document**
**and Closure Plan for the Present Landfill**
**June 20, 2002**

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Comment #1

Based on data in Appendix A, zinc levels exceed the water quality standard by 6 to 18 times, therefore it should be a COC. The statement in the response that silver is "not supported by current monitoring activities" needs to clarify whether silver is not currently sampled for or is not detected in samples.

Comment #2

PCOCs for the seep and surface water are inconsistent. For example, Mo and Ni are PCOCs for the seep, but are not sampled in surface water; Zn is a COC in surface water, but is not sampled at the seep. Future sampling programs need to be consistent.

The environment and landfills are dynamic systems, and current conditions should be evaluated using recent data rather than data from 1992 studies. The attainment of water quality standards for all parameters will have to be demonstrated at closure; more current data will be needed to make that demonstration.

Comment #3

Waters in the Landfill Pond and No Name Gulch are also waters of the State. The leachate has a listed waste code attached to it and the statement that the water exiting the treatment system "no longer carries the F039 listed waste code" is incorrect. There have been detections and on occasion exceedances of underlying water quality standards, e.g., benzene and vinyl chloride. The current and proposed leachate treatment systems have been designed to remove organic compounds from the water. If the systems were regulated by the Clean Water Act via a NPDES permit, and they qualified for a wastewater treatment unit exemption, the F039 would be granted an exemption from RCRA regulation at the point of discharge. Since this is not the case, the listing remains unless a demonstration is made that the water no longer contains the waste. This "defacto delisting" can be accomplished by demonstrating that the water meets surface water standards. This demonstration must be made on a regular basis until leachate is no longer generated.

Pond sediments may contain F039 listed waste. As described in the IM/IRA, the sediments will be sampled and dispositioned appropriately.

Comment #5
Landfill closure requirements in the Colorado Hazardous Waste Act include implementing the following systems: liner, leak detection, leachate collection, run-on control, run-off control, and wind dispersal controls. The intent is clearly to isolate the waste. To imply that an alternative cover will "isolate landfill wastes" is not reasonable.

Comment #6
The response is unclear. In the text in Sections 2.1 and 2.4 the depth to leachate and groundwater is the same. The relationship or distinction between groundwater and leachate needs to be clear.

Comment #7
Instead of removing the sentence, state that an investigation is being conducted to determine and evaluate the status of the system. This system may result in contaminant migration and is therefore a key piece of information that cannot simply be eliminated from consideration.

Comment #8
The fracture zone flow should also be considered during the groundwater evaluation.

Comment #9
The PQL listed in ALF for mercury (1 µg/l) would not be protective if the pond remained and fish were introduced. The standard listed in the Basic Standards for Surface Water (5 CCR 1002-31, Table III) is .01 µg/l, which is based on bioaccumulation in fish. If the pond remains, an institutional control may be required to limit contact with fish.

Comment #12
Based on the comment, the last sentence of the first paragraph in the response should state, "The passive treatment system will not be impacted."

Comment #13
If sediments are not dispositioned off-site or closed under the cover, then erosional (water), dispersal (wind) and stability controls need to be identified to minimize potential of contaminant migration.

Comment #15
The passive treatment system is a point source discharge to waters of the State, which must be monitored and managed. The Site must follow the substantive requirements of the Clean Water Act (NPDES) by meeting discharge limits (i.e., Surface Water Standards in ALF). This should be explained in Section 8.3.2.

Comment #17
The response states that, "wastes will not be moved during cover construction." The response goes on to twice describe "wastes generated as a result of the proposed action." These two

statements seem inconsistent.

Comment #21
This interim measure is intended to be a final remedial action; the IM/IRA is also a RCRA closure plan; there is no other action anticipated for the Present Landfill in the Site Baseline. Institutional controls will be required at the landfill. What they will consist of and how they will be implemented and enforced must be described in this decision document. An environmental covenant with the State is a mechanism that meets these criteria.

Comment #22
The water quality parameters need to include PCBs given that there are likely PCB source materials in the landfill.

It is unclear how the intent of RFCA Attachment 10 will be met and how it correlates with the flow diagram in Figure 3 (the only option is to continuously monitor).

Comment #23
Per RFCA Attachment 5, section 2.3, consideration of compliance and monitoring points changes should terminal ponds be removed. For No Name Gulch, the landfill pond is the only water management mechanism, and therefore can be considered a terminal pond. Given the current method of water management with no direct discharge to No Name Gulch, no POC was determined at the time of RFCA. Since these waters discharging from the landfill will now flow directly into No Name Gulch without being captured and monitored at a terminal pond, it will be necessary to establish a POC. The leachate would otherwise be allowed to discharge directly to waters of the US/State and flow off-site without passing through an enforceable point, thereby constituting an unregulated discharge to state waters.

RFCA Attachment 5, section 2.3 also states – "All final remedies must be designed to protect surface water for any use as measured at the nearest and/or most directly impacts surface water in segments 4a, 4b and 5. Interim remedies will be consistent with this as a goal. Any temporary modifications will be removed." Given this statement the nearest and/or most directly impacted water is the landfill pond itself and/or No Name Gulch (both segment 4a per 5 CCR 1002-38) depending on the final decision to retain or not retain the pond. Therefore, the point of compliance monitoring needs to be at the point source entering waters of the State, not at the current site boundary.

Table 2 of the draft document requires revision per initial State comments. Table 2 also should incorporate the POC GS11 for the current practice scenario.

Comment #24
Table 3 of the 7-30-02 draft requires revision to include PCOC metals and tritium.

If the Landfill pond goes away or is managed differently from current practices, where discharge goes directly to No Name Gulch (waters of the State), then water quality standards have to be attained for all parameters, not just PCOCs. In addition, landfill systems are dynamic and contaminants can change. Using data from 1992 time frames for interim/final remedy decision-making is not prudent. Verification of potential presence of PCOCs at concentrations that could make them COCs needs to be evaluated for decision-making on protection of human health and the environment.

Comment #25

RCRA post-closure requirements include control of run-on/run-off. Elimination of the surface water diversion ditch requires justification in the form of a plan or mechanism for the control of run-on/run-off for the ET cover.

Comment #35

Data is critical to decision-making associated with the pond and management of the seep discharge, therefore an accurate summary of data needs to be presented. Access to historical records may not be readily available for stakeholders.